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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/812,564

03/30/2004

Robert Hasbun

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ALEXANDRIA, VA 22320-4850

EXAMINER

HENEGHAN, MATTHEW E

ART UNIT

PAPER NUMBER

2139

MAIL DATE

DELIVERY MODE

03/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/812,564	Applicant(s) HASBUN, ROBERT	
	Examiner Matthew Heneghan	Art Unit 2139	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-37 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to the previous office action, Applicant has amended claims 1, 3-7, 9, 10, 12-21, 24, 25, 28-35, and 37 and cancelled claim 8. Claims 1-7 and 9-37 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 9, 10, 12-15, 17, and 28-33 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0268143 to Poisner.

As per claims 9, 10, 12-14, 17, and 28-33, Poisner discloses a device with a machine-accessible storage medium having a CPU (the second processor, which constitutes the "other hardware component") and a microcontroller (the first processor, which also constitutes and applications processor) (see figure 2). The microcontroller receives data, such as the results key matrix scan to verify pressed keyboard data or movement data (which constitutes an information update) (see paragraphs 33-34) for

use by the CPU. The microcontroller is placed into trusted mode before the data is transmitted to the rest of the device (see paragraph 35). The CPU must also be in trusted mode to receive the data (see paragraph 36). The request to transfer data is also verified and the microcontroller will not transfer protected data to untrusted addresses (see paragraphs 37-39). Regardless of whether the data is trusted or untrusted, the procedure ends with an exiting from the trusted mode (see paragraph 40); therefore, if the credibility of the data transfer is not realized by the microprocessor, no data transfer takes place (a form of remediation by the CPU).

Regarding claim 15, the microcontroller learns of this in the event that the CPU tries to read the protected registers, triggering an exit from protected mode (see paragraph 40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 11, 18-22, 24, 25, 27, and 34-37 are rejected under 35

U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0268143 to Poisner.

As per claims 1, 2, 11, 18, 19, 21, 24, 25, and 34-37, Poisner discloses a device having a CPU (the second processor, which constitutes the "other hardware component") and a microcontroller (the first processor, which also constitutes and applications processor) (see figure 2). The microcontroller receives data, such as the results key matrix scan to verify pressed keyboard data or movement data (which constitutes an information update) (see paragraphs 33-34) for use by the CPU. The microcontroller is placed into trusted mode before the data is transmitted to the rest of the device (see paragraph 35). The CPU must also be in trusted mode to receive the data (see paragraph 36). The request to transfer data is also verified and the microcontroller will not transfer protected data to untrusted addresses (see paragraphs 37-39). Regardless of whether the data is trusted or untrusted, the procedure ends with an exiting from the trusted mode (see paragraph 40); therefore, if the credibility of the data transfer is not realized by the microprocessor, no data transfer takes place.

Poisner does not explicitly state that the processor is a wireless processor.

Official notice is given that it is well-known in the art to use wireless processors in mobile platforms (such as Poisner, see Title), since wireless connectivity enhances mobility.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Poisner using a wireless communications processor, as wireless connectivity enhances mobility in mobile platforms.

Regarding claim 20, no mechanism is disclosed by which the CPU can directly modify the data in the microprocessor.

As per claim 22, a signal is received by the microcontroller to initiate a trusted state (see paragraph 39). This ICH signal may be construed as a reset signal.

Regarding claim 27, wireless interfaces implicitly comprise an antenna.

4. Claims 3-6, 16, 23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0268143 to Poisner as applied to claim 1 et al. above and further in view of U.S. Patent No. 7,047,343 to Shaw.

Regarding claims 3, 4, 16, 23, and 26, Poisner does not disclose the use of a register for the microcontroller to signal to the CPU as to whether it is in a trusted state.

Shaw discloses the use of a one-way register to signify that the microprocessor is behaving in a trusted mode, which is written to by the microcontroller and read by the CPU, using a specific bit in that signifies the mode (see column 4, lines 43-46).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Poisner using a register written to by the microcontroller to signify trusted mode, as per Shaw's analogous invention.

Regarding claims 5 and 6, since CPU would apprise the mode of the microcontroller from the register, it would be obvious for the CPU to not execute (which is a form of remediation) the operation if the value didn't indicate a trusted mode.

Allowable Subject Matter

5. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The closest cited art, Poisner, uses a hard-wired system for communications between the processors; no art could be found that would suggest it to be obvious to enter or exit the trusted states in an information data transfer based upon an over-the-air connection received via the CPU and forwarded to the microcontroller.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached at (571) 272-4063.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Matthew Heneghan/

Primary Patent Examiner, USPTO AU 2139

March 6, 2008